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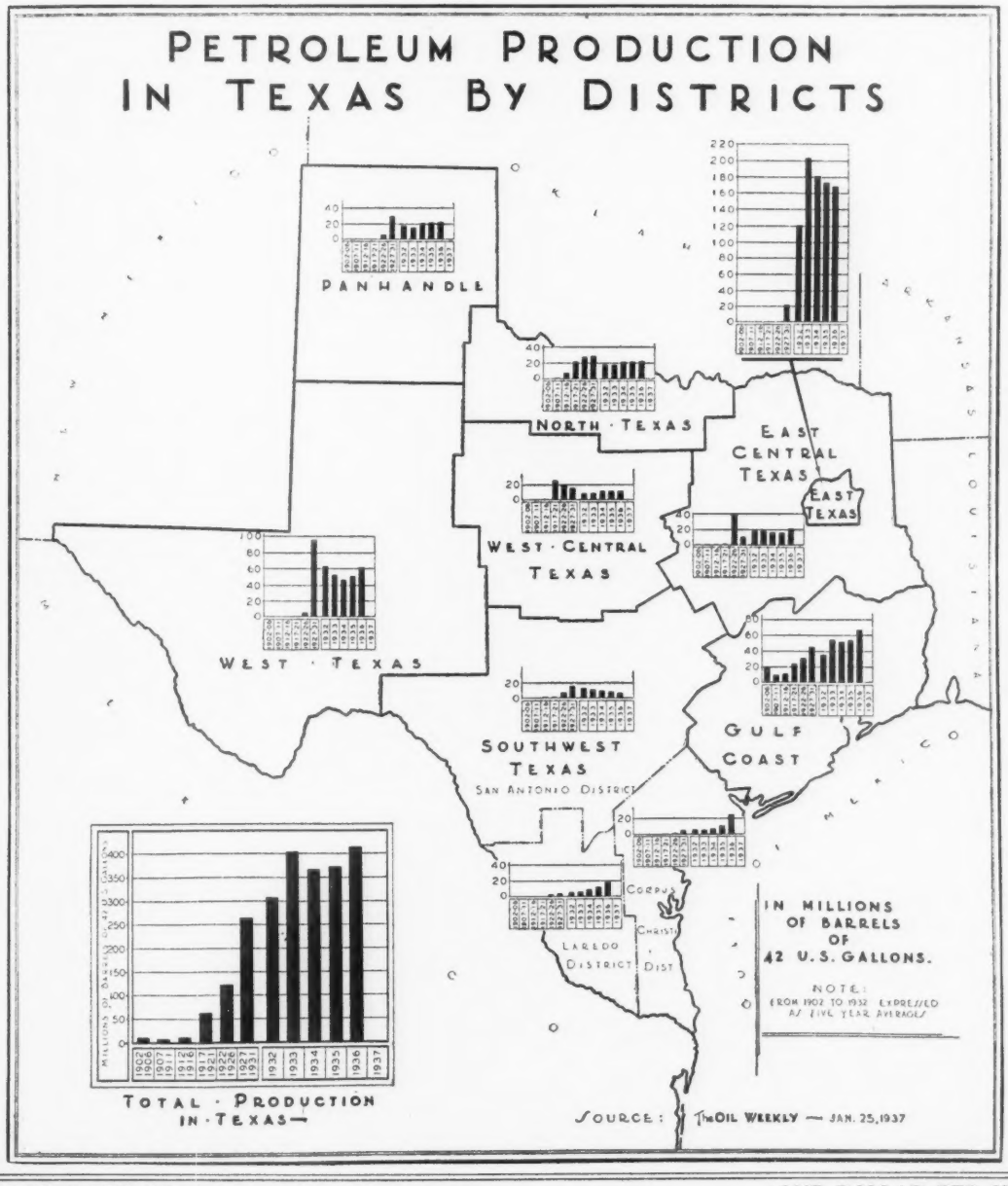

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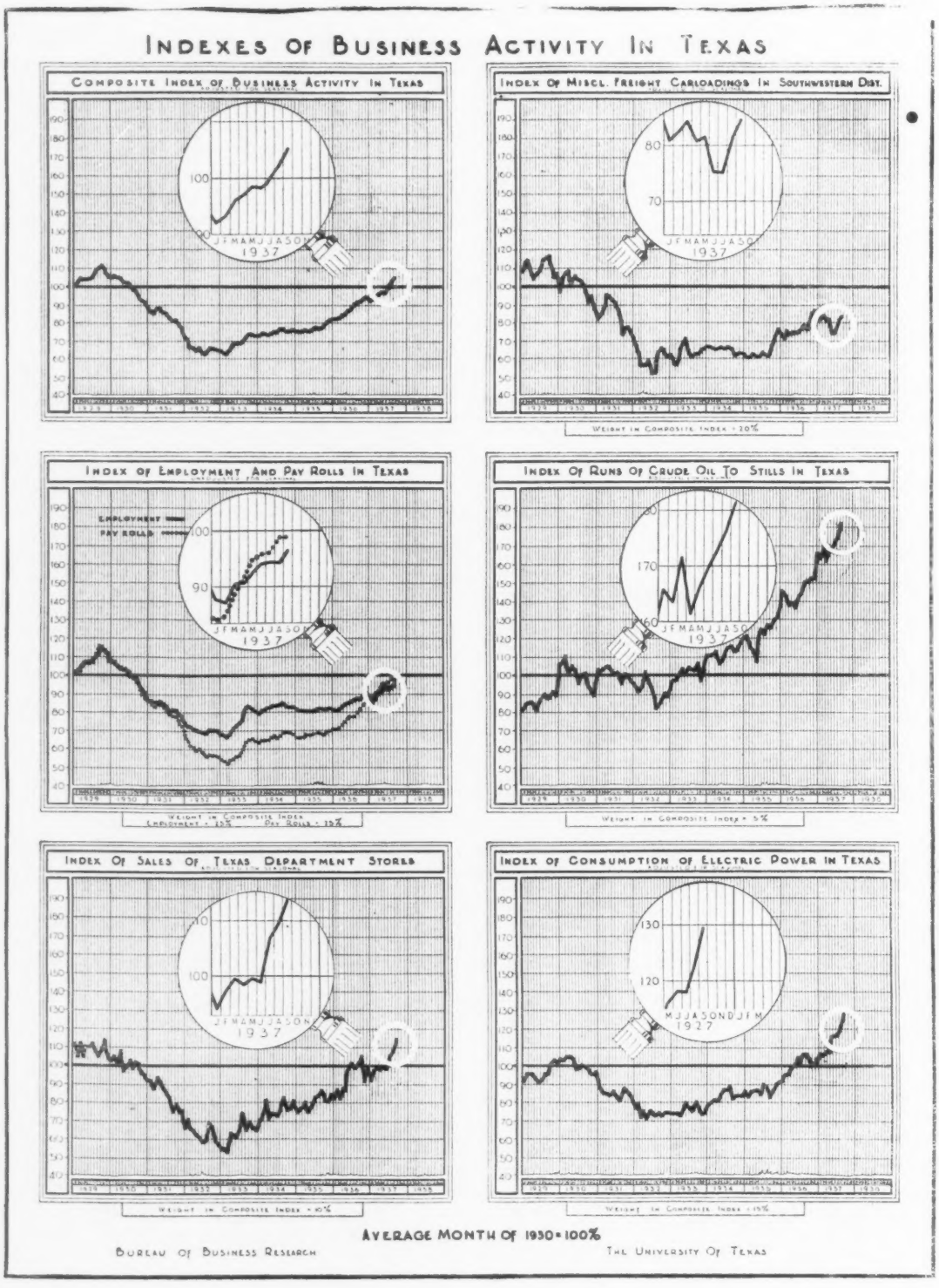
INDEXES OF BUSINESS ACTIVITY IN TEXAS
COMPOSITE INDEX OF BUSINESS ACTIVITY IN TEXAS
INDEX OF MISCL. FREIGHT CARLOADINGS IN SOUTHWESTERN DIST.
WEIGHT IN COMPOSITE INDEX = 20%
INDEX OF EMPLOYMENT AND PAY ROLLS IN TEXAS
EMPLOYMENT
PAY ROLLS
WEIGHT IN COMPOSITE INDEX
EMPLOYMENT = 15%
PAY ROLLS = 15%
INDEX OF RUNS OF CRUDE OIL TO STILLS IN TEXAS
WEIGHT IN COMPOSITE INDEX = 5%
INDEX OF SALES OF TEXAS DEPARTMENT STORES
WEIGHT IN COMPOSITE INDEX = 10%
INDEX OF CONSUMPTION OF ELECTRIC POWER IN TEXAS
WEIGHT IN COMPOSITE INDEX = 15%
AVERAGE MONTH OF 1930 = 100%
BUREAU OF BUSINESS RESEARCH
THE UNIVERSITY OF TEXAS

SEPTEMBER RETAIL SALES OF INDEPENDENT STORES IN TEXAS

	September 1937				Year-to-date 1937		
	Total Number of Firms Reporting	Dollar Sales	Percentage Change in Dollar Sales from Sept. 1936	Percentage Change in Dollar Sales from Aug. 1937	Number of Firms Reporting	Dollar Sales	Percentage Change in Dollar Sales from Year-to-date 1936
TOTAL TEXAS	971	16,860,927	+ 10.1	+ 14.4	587	106,329,425	+ 7.1
TEXAS STORES GROUPED BY PRODUCING AREAS:							
DISTRICT 1-N	53	739,084	+ 17.3	+ 8.5	28	3,919,461	+ 17.8
Amarillo	15	371,288	+ 22.3	+ 21.5	8	1,892,648	+ 20.1
Pampa	13	219,833	+ 13.3	− 1.3	4	1,207,142	+ 14.3
Plainview	8	69,375	− 1.1	+ 6.0	5	308,377	+ 9.0
All Others	17	78,588	+ 25.9	− 10.2	11	511,294	+ 23.3
DISTRICT 1-S	28	561,179	+ 23.3	+ 0.4	14	2,764,379	+ 20.5
Big Spring	9	151,974	+ 38.4	+ 12.7	4	869,553	+ 36.8
Lubbock	14	386,043	+ 19.3	− 2.4	7	1,669,159	+ 13.1
All Others	5	23,162	+ 7.1	− 17.8	3	225,667	+ 23.1
DISTRICT 2	83	663,160	+ 17.9	+ 20.5	51	3,027,620	+ 3.9
Abilene	16	231,655	+ 6.1	+ 9.1	6	763,265	+ 10.2
Snyder	6	37,204	+ 38.7	+ 36.9	...	‡	...
Vernon	6	28,760	+ 20.4	+ 22.2	5	203,410	− 0.4
Wichita Falls	9	111,937	+ 35.6	+ 44.8	6	434,096	+ 11.8
All Others	46	253,604	+ 20.4	+ 20.9	34	1,626,849	− 0.1
DISTRICT 3	37	214,651	+ 10.5	− 2.9	14	1,014,853	+ 7.4
Breckenridge	4	20,362	+ 15.8	+ 12.8	...	‡	...
Brownwood	11	65,519	+ 0.6	− 17.0	3	419,044	+ 7.6
Eastland	6	14,005	+ 14.4	− 0.9	...	‡	...
Stephenville	6	32,914	+ 13.4	+ 23.4	...	‡	...
All Others	10	81,851	+ 16.3	− 1.6	11	595,809	+ 7.2
DISTRICT 4	243	5,890,936	+ 6.6	+ 20.7	153	40,074,972	+ 5.3
Cleburne	9	50,757	+ 8.5	+ 30.1	7	255,045	+ 4.6
Corsicana	11	86,607	+ 6.6	+ 19.3	9	584,264	+ 9.5
Dallas	54	3,329,036	+ 10.2	+ 27.6	38	23,769,305	+ 6.3
Denison	6	31,328	+ 7.4	+ 16.2	...	‡	...
Fort Worth	30	1,208,658	− 0.5	+ 7.8	18	8,562,450	+ 3.5
Paris	3	105,014	+ 6.5	+ 12.7	...	‡	...
Sherman	7	49,508	+ 6.5	+ 24.1	4	302,540	+ 13.5
Taylor	10	99,844	+ 4.0	+ 15.3	8	587,245	− 3.3
Temple	10	67,789	+ 3.1	+ 31.4	6	364,855	− 1.4
Waco	35	445,701	+ 11.1	+ 31.4	13	2,098,188	+ 8.8
All Others	68	416,694	− 2.2	+ 3.8	50	3,551,080	+ 2.7
DISTRICT 5	105	1,041,717	− 1.8	+ 15.7	60	6,495,490	− 5.5
Bryan	11	111,295	− 0.7	+ 50.9	7	569,454	− 3.6
Longview	7	70,536	+ 5.8	− 3.9	4	507,575	− 4.5
Marshall	11	57,739	+ 7.9	+ 15.8	3	280,918	+ 7.2
Nacogdoches	4	56,701	− 1.5	− 11.7	4	505,172	− 9.7
Tyler	20	253,340	− 8.1	+ 8.6	9	1,778,976	− 3.2
All Others	52	492,106	− 0.7	+ 21.2	33	2,853,395	− 7.7
DISTRICT 6	42	1,096,475	+ 4.6	+ 8.8	32	8,142,612	+ 10.6
El Paso	30	982,675	+ 4.0	+ 11.1	23	7,149,526	+ 8.9
All Others	12	113,800	+ 10.2	− 7.5	9	993,086	+ 24.1
DISTRICT 7	54	467,740	+ 36.4	+ 21.1	23	2,060,177	+ 21.4
Brady	8	30,364	+ 6.6	+ 19.1	...	‡	...
San Angelo	20	315,049	+ 57.7	+ 23.9	11	1,520,780	+ 26.9
All Others	26	122,327	+ 6.7	+ 14.6	12	539,397	+ 8.3
DISTRICT 8	132	2,615,132	+ 11.6	+ 10.7	90	17,411,802	+ 7.7
Austin	23	509,490	+ 13.8	+ 26.6	12	3,183,581	+ 13.0
Corpus Christi	9	155,329	+ 36.5	− 19.8	6	1,155,587	+ 12.8
Lockhart	4	51,232	+ 15.2	+ 7.0	4	386,241	− 2.9
San Antonio	33	1,413,317	+ 8.5	+ 14.3	23	9,459,540	+ 7.2
San Marcos	5	43,566	+ 49.5	+ 9.8	4	268,200	+ 3.5
All Others	58	442,198	+ 9.0	− 0.7	41	2,958,653	+ 4.1
DISTRICT 9	136	3,124,153	+ 12.4	+ 16.8	81	18,773,188	+ 7.8
Beaumont	10	209,182	+ 11.8	+ 0.2	6	1,074,347	+ 10.8
Galveston	11	174,455	+ 7.8	+ 3.2	10	1,535,628	+ 5.0
Houston	62	2,259,039	+ 13.7	+ 23.4	37	13,671,304	+ 7.3
Port Arthur	15	220,673	+ 8.7	+ 6.4	11	1,099,730	+ 18.5
Victoria	7	41,071	+ 3.8	+ 7.9	...	‡	...
All Others	31	219,733	+ 9.3	− 0.1	17	1,392,179	+ 6.0
DISTRICT 10	58	446,700	+ 20.8	− 12.8	41	2,644,871	+ 17.1
Brownsville	14	104,449	+ 40.3	− 8.8	13	852,004	+ 28.3
Harlingen	13	81,476	+ 27.1	− 28.8	5	464,542	+ 14.5
Laredo	5	108,348	+ 9.2	+ 7.5	...	‡	...
All Others	26	152,427	+ 15.4	− 16.4	23	1,328,325	+ 11.8

See map on page 13 of the September 29, 1937, issue showing crop reporting districts.

Note: Prepared from reports from independent retail stores to the Bureau of Business Research, coöperating with the United States Department of Commerce.
‡Not available.

SEPTEMBER EMPLOYMENT AND PAY ROLLS IN TEXAS CLASSIFIED BY CITIES AND EMPLOYMENT GROUPS

Pay Rolls Ending Nearest Fifteenth of Month

	No. of Establishments	Workers: Number Sept. 1937	Workers: Percentage from Sept. 1936	Workers: Change from Aug. 1937	Pay Roll: Dollars Sept. 1937	Pay Roll: Percentage from Sept. 1936	Pay Roll: Change from Aug. 1937	Average Weekly Wage per Worker: Sept. 1937	Sept. 1936	Aug. 1937
Abilene	16	252	+ 9.6	+ 2.0	$ 5,774	+ 17.0	+ 5.0			
Amarillo	41	1,118	+ 19.2	+ 2.9	30,517	+ 41.6	− 0.7			
Austin	23	649	+ 1.6	+ 5.4	12,201	+ 2.6	+ 3.4			
Beaumont	29	3,124	+ 0.8	+ 2.8	86,839	+ 25.8	− 4.9			
Dallas	185	11,105	+ 6.4	+ 5.5	255,393	+ 12.4	+ 3.3			
Denison	8	839	− 3.6	− 2.8	10,592	+ 6.3	− 8.3			
El Paso	71	2,501	+ 25.6	+ 3.8	53,277	+ 35.1	− 3.4			
Fort Worth	99	6,733	+ 6.3	+ 2.0	157,671	+ 26.1	+ 0.3			
Galveston	20	714	+ 6.6	+ 7.2	18,580	+ 11.4	+ 2.8			
Houston	194	15,020	+ 17.2	+ 6.0	379,029	+ 30.3	+ 6.1			
Laredo	12	172	+ 9.6	− 1.1	2,626	+ 3.3	− 4.3			
Port Arthur	8	7,834	+ 6.9	− 2.1	240,197	+ 21.4	− 4.1			
San Angelo	7	139	+ 1.5	− 0.7	2,323	+ 2.0	− 5.2			
San Antonio	138	5,043	+ 5.9	+ 1.6	103,112	+ 11.7	+ 1.1			
Sherman	13	684	− 4.6	− 11.5	11,941	− 8.7	− 20.9			
Waco	37	1,872	+ 12.8	+ 1.2	35,578	+ 18.4	− 1.1			
Wichita Falls	28	707	+ 15.5	− 2.8	17,110	+ 27.2	− 0.2			
All Other Cities	959	36,534	+ 3.7	+ 1.3	940,968	+ 15.9	− 1.8			
STATE	1,888	95,040	+ 7.2	+ 2.3	2,363,728	+ 19.4	− 0.3	$24.87	$22.34	$25.51
BUILDING MATERIALS	99	9,315	+ 9.2	+ 0.5	195,785	+ 23.1	− 1.8	21.02	18.65	21.52
Brick, Tile, Terra Cotta	11	431	− 13.8	− 22.1	5,519	− 7.0	− 24.3	12.81	11.86	13.19
Cement	8	1,380	+ 6.7	+ 4.6	32,848	+ 24.8	+ 5.1	23.80	20.35	23.69
Foundries, Machine Shops	26	2,564	+ 22.8	− 2.5	67,245	+ 33.8	− 4.6	26.23	24.06	26.81
Millwork	14	508	+ 19.8	− 3.2	10,647	+ 23.4	+ 0.5	20.96	20.35	20.18
Saw Mills	12	3,164	+ 4.9	+ 5.9	48,307	+ 11.9	− 1.8	15.27	14.32	16.47
Structural Iron Works	13	1,136	+ 5.5	+ 1.7	27,878	+ 25.4	+ 2.2	24.54	20.65	24.41
Other Building Materials	15	132	0.0	− 4.3	3,341	+ 32.0	+ 0.7	25.31	19.18	24.04
CHEMICALS‖	28	722	+ 11.8	+ 4.3	15,970	+ 22.5	+ 1.9	22.12	20.18	22.64
CLOTHING AND TEXTILES	35	3,871	+ 2.0	+ 1.6	47,750	+ 6.2	− 0.6	12.34	11.85	12.61
Cotton Textile Mills	7	1,891	+ 23.8	+ 5.2	25,853	+ 41.6	+ 6.2	13.67	11.95	13.54
Men's Work Clothing	13	1,373	− 20.6	− 0.7	13,949	− 28.6	− 5.9	10.16	11.29	10.73
Women's Clothing	5	128	+ 13.3	+ 15.3	1,562	+ 24.5	+ 1.7	12.20	10.27	13.84
Other Textile Products	10	479	+ 12.7	− 7.7	6,386	+ 5.9	− 12.9	13.33	14.20	14.12
COTTON OIL MILLS	29	1,278	+ 19.0	+ 80.8	19,816	+ 41.4	+ 77.0	15.51	13.05	15.84
DISTRIBUTION	689	20,440	+ 9.4	+ 5.5	425,987	+ 13.7	+ 2.2	20.84	20.05	21.51
Retail Trade	453	14,635	+ 9.7	+ 6.3	275,283	+ 15.4	+ 5.4	18.81	17.87	18.97
Wholesale Trade	236	5,805	+ 8.8	+ 3.6	150,704	+ 10.8	− 3.1	25.96	25.50	27.76
FOOD PRODUCTS	111	7,369	+ 6.6	− 0.2	169,177	+ 23.5	− 1.3	22.96	19.81	23.23
Bakeries	21	728	+ 9.3	+ 1.1	14,913	+ 10.7	+ 0.9	20.48	20.24	20.52
Beverages	17	440	+ 14.3	− 2.7	10,727	+ 14.9	− 2.1	24.38	24.26	24.25
Flour Mills	7	455	+ 9.4	0.0	11,122	+ 29.3	+ 2.3	24.44	20.68	23.90
Ice Cream	6	332	+ 15.7	− 5.1	6,394	+ 12.0	− 12.1	19.26	19.89	20.77
Meat Packing, Slaughtering	9	3,708	+ 8.5	− 0.8	99,370	+ 33.8	− 0.4	26.80	21.74	26.68
Other Food Products	51	1,706	− 2.1	+ 2.3	26,651	+ 4.2	− 4.3	15.62	14.67	16.70
FOREST PRODUCTS	29	1,509	+ 4.9	+ 2.7	29,601	+ 14.3	+ 6.8	19.62	18.00	18.87
Furniture Manufacturing	7	522	0.0	+ 5.0	12,282	+ 20.7	+ 17.1	23.53	19.50	21.10
Paper Products	12	528	+ 5.0	+ 2.5	10,799	+ 9.3	+ 7.0	20.45	19.65	19.60
Other Forest Products	10	459	+ 10.9	+ 0.4	6,520	+ 11.5	− 8.6	14.20	14.12	15.61
PETROLEUM	58	25,078	+ 6.4	− 0.2	822,856	+ 24.8	− 2.8	32.81	27.96	33.69
Crude Petroleum Producing	24	5,509	+ 7.5	+ 0.6	199,994	+ 19.6	+ 0.7	36.30	32.61	36.27
Petroleum Refining	34	19,569	+ 6.1	− 0.4	622,862	+ 26.6	− 3.9	31.83	26.67	32.97
PRINTING AND PUBLISHING	56	1,692	+ 6.2	+ 2.1	57,251	+ 10.0	+ 5.6	33.84	32.67	32.73
Commercial Printing	32	453	+ 4.6	+ 1.6	11,433	+ 10.4	+ 4.2	25.24	23.91	24.61
Engraving	7	45	+ 2.3	+ 4.7	2,073	+ 5.4	+ 2.4	46.07	44.68	47.07
Newspaper Publishing	17	1,194	+ 7.0	+ 2.2	43,745	+ 10.1	+ 6.1	36.64	35.59	35.30
PUBLIC UTILITIES	503	13,163	+ 1.8	− 1.0	367,680	+ 11.8	− 1.6	27.93	25.45	28.12
Power and Light	443	8,024	+ 11.6	+ 4.6	224,953	+ 18.8	+ 2.5	28.04	26.33	28.60
Steam Railroad Repair Shops	17	2,841	+ 0.3	− 1.9	81,001	+ 12.4	− 2.7	28.51	25.45	28.75
Other Public Utilities	43	2,298	− 20.8	− 15.6	61,726	− 8.6	− 13.1	26.86	23.27	26.10
QUARRYING & NON-METALLIC MINING	29	1,497	− 11.4	− 0.3	41,217	+ 0.4	− 8.9	27.53	24.30	30.15
SERVICE	140	4,622	− 0.4	− 4.0	67,643	+ 1.6	− 5.8	14.64	14.35	14.92
Business and Personal Service	37	393	− 28.4	− 6.2	9,967	− 14.1	− 5.9	25.36	21.13	25.27
Hotels	24	1,956	+ 8.4	+ 0.5	22,542	+ 14.5	− 0.5	11.52	10.91	11.64
Ice	57	999	− 1.1	− 13.9	18,579	− 4.7	− 16.0	18.60	19.31	19.07
Laundries, Dyeing and Cleaning	22	1,274	− 0.1	− 1.0	16,555	+ 4.8	+ 0.7	12.99	12.38	12.77
ALL OTHER INDUSTRIES	82	4,484	+ 43.4	+ 17.4	102,995	+ 61.7	+ 17.0	22.97	20.36	23.05

‖Chemical and Allied Industries not elsewhere classified.

NOTE: Prepared from reports from Texas industrial establishments to the Bureau of Business Research, coöperating with the United States Bureau of Labor Statistics.

Business Review and Prospect

The recent collapse of security prices on the stock market, the declining trend of commodity prices, and the sharp drop of activity in the capital goods industries have aroused considerable apprehension regarding the future course of industry and trade in the country at large. The drab picture is brightened considerably, however, by the high rate of retail trade and the fact that this trade is being supported on the broad base of improved farm buying power and increased urban pay rolls. As a consequence, retail inventories should soon be reduced, which in turn may be expected to stimulate wholesale and manufacturing activity.

Texas Business

Contrary to the current downward tendency of business in the country at large, as shown in Barron's index of industry and trade developed by Warren Persons, Texas business continues its strong upward trend, the gain from August to September having been almost as great as that from July to August. After adjustment for seasonal variation the composite index for September is 105.6, compared with 103.0 for August and 91.7 for September, 1936, an increase of 14 per cent over last year. The index is expressed as a percentage of the average month in 1930 which is used as a base.

Each of the components of the index for September made sharp gains over the preceding month, except that of pay rolls, for which the decline—98.9 to 98.7—was almost negligible. The index of employment rose from 94.4 to 96.6; miscellaneous freight carloadings from 81.4 to 84.1; runs of crude oil to stills from 176.3 to 182.3; department store sales from 110.0 to 115.3, and electric power consumption from 124.0 to 129.0.

Compared with September last year, each component of the index made a wide gain. The index of employment increased from 88.4 to 96.6; pay rolls from 80.5 to 98.7; miscellaneous freight car loadings from 79.0 to 84.0; runs of crude oil to stills, 150.6 to 182.3; department store sales 101.5 to 115.3; and electric power consumption, 106.8 to 129.2.

Texas Farm Cash Income

The computed farm cash income in Texas during September was one hundred one million dollars, compared with eighty-seven million dollars during September last year, an increase of more than 15 per cent. The average September farm cash income during the sixty months based period, 1928–32, was approximately one hundred fourteen million dollars, so that the September index (percentage of the base period income) was 88.4 this year and 76.4 last year.

The wide variations in the indexes, shown in the table below, as between the different crop-reporting districts during September, and also as between the same district this year and a year ago are attributable to the marked differences in production of the main sources of cash income, and to changes in prices of major crops and of live stock enterprises compared with last year and with the base period 1928–32. It should be added that government benefit payments and subsidies are not included in any of these computations.

INDEX OF AGRICULTURAL CASH INCOME

District	September 1937	September 1936	August 1937
1–N	79.4	58.6	155.8
1–S	165.0	67.8	111.6
2	124.0	76.0	109.0
3	73.2	57.0	155.5
4	89.7	92.9	134.1
5	77.0	76.2	105.1
6	111.9	59.6	189.3
7	131.7	51.6	137.0
8	60.0	55.1	108.9
9	88.4	64.4	107.8
10	66.6	26.9	205.6
*10–A	44.5	18.6	317.5
STATE	88.4	76.4	135.2

*Included in District 10.

See map on page 4 of the September 29, 1937, issue showing crop reporting districts.

F. A. Buechel.

For Other Texas Data, See Statistical Tables at the End of This Publication

A Cotton Policy for the United States

Unfortunately there is a belief in some parts of the United States that the cotton problem is strictly a sectional problem. That is a grave error. The cotton problem of the United States is fundamentally a national problem. It is a national problem because it is a market problem, resulting partly from Federal laws and policies. Every region in the United States is vitally concerned over the loss of cotton markets because the sales of cotton determine largely the ability of the South to buy their products.

The economy of the United States is a market economy. This means we have a high degree of regional specialization in production and, therefore, of regional interdependence. Our whole system of production, then, depends on our maintaining our market for the products of every region. This market is partly domestic and partly foreign, but from the standpoint of our economy the two constitute one market because they are interdependent. What is called the market is essentially the sum of a series of transactions made in the exchange of regional surpluses. Make no mistake, no important region in this chain of interdependent market regions can lose its market, which is its buying power, without profoundly affecting the economy of the other regions.

It is true that our exports of commodities normally amount to less than ten per cent of our total production, but that is no measure of the importance of exports. The cotton growing South is one of the important regions in the group of interdependent regions; and the export market for American cotton constitutes over 50 per cent of the total market. The cotton market is normally over a billion dollar market; and, what is still

more important, over 80 per cent of the cotton of the Southwest goes to export. Prior to the depression the annual cash income from cotton in Texas alone was over $400,000,000. Cotton is the source of employment and buying power of almost one-third of the total agricultural population of the entire United States. There are still hundreds of thousands of others who get employment and buying power from ginning, warehousing, compressing, merchandising, transporting, financing, and otherwise serving this great industry.

If the South loses its foreign markets for cotton, it will not only be unable to buy Corn Belt meat, Great Plains wheat, Lake States dairy products, and Eastern and Northern manufactures but it will inevitably use its idle acres, manpower, and other resources to produce what it formerly bought, and it will produce a surplus to sell. The truth of this statement is already strikingly written in the records of the Federal Crop Reporting Board and may be illustrated with figures on hog production. States outside of the Corn Belt increased their hog population from 12,051,000 in 1930 to 16,301,000 in 1937, or 33 per cent. The two geographical regions containing the Corn Belt on the other hand, reduced their hog population by five and five-tenths per cent in their control program to raise prices. The five leading hog-producing states—Iowa, Illinois, Missouri, Indiana, and Minnesota—had 20 per cent fewer hogs in 1937 than in 1930. In other words, buyers of meat in this country are just as definitely resisting controlled meat prices as foreign cotton buyers are resisting artificial prices for American cotton.

The fact is, the markets for the Corn Belt or the dairy regions are essentially the same in nature as the cotton market. In each case the region is dependent on markets beyond its borders. The markets for these domestically consumed products are no more secure than the foreign markets for American cotton.

Many seem to think the home market is safe, and that the only thing necessary to preserve it is to raise the tariff wall high enough to keep the foreigner out. That is wrong; the home market is the result of the free exchange of goods produced under conditions of large-scale, specialized, regional production. Present policies of restriction of production and marketing are destroying specialized production, and that is the essence of the home market. The development of a sound economic policy in the United States waits upon a realization of this central fact. If we cripple specialized regional production by destroying markets, our wide systems of transportation and communication, processing industries, and trade will be reduced accordingly. Strange as it may seem, each of these represents larger dollar income and greater spending power than agriculture.

Aggressive Market Policy, a Necessity

If the United States is to maintain its present system of efficient production through a market economy, it is imperative that it abandon its scarcity program and destruction of markets and adopt an aggressive program for the expansion and development of markets. Employment is a function of production, and the only way to reduce relief rolls and maintain property values in this country—whether of farm land, factories, or other property—is to open markets for full production. It is for these reasons that the recapture of cotton markets is the most pressing problem confronting the Nation.

The principal objective of our national agricultural policy should be to preserve and expand markets, the major part of which are the home markets. This is only another way of saying that the major objective of our policy should be the preservation of our system of large-scale, specialized, regional production. The cotton growing region is one of the most important in the whole complex of interdependent regions because cash sales of cotton normally exceed those of any other crop. A large share of the cotton market is foreign and a large part of that market has been, or is, in the process of being lost.

Recapture of Cotton Market

(1) The first objective in a constructive cotton policy, and also in our national economic policy, should be to restore and preserve markets for raw cotton. This will be no easy job. There are many factors in the way of it.

The nine countries which buy the bulk of our exports of cotton find their trade balance with the United States strongly against them. In 1936 the United States exported to these countries merchandise valued at $946,720,000, whereas the goods imported from them were valued at $561,140,000. On the other hand, an examination of the trade of the twenty-two leading foreign countries, from which the United States buys more than it sells, reveals the fact that these are raw material producing countries and that they buy comparatively little American cotton. In 1935 these countries sold commodities to the United States valued at $888,150,000 and bought goods from the United States valued at only $413,048,000. They buy finished manufactures. Foreign buyers of American cotton are thus unable to get exchange out of direct trade and are forced to get it out of some sort of multi-lateral arrangement. Because of uncertain values of currencies, trade quotas, and other restrictions to balance exchange, international trade has been reduced essentially to barter. Barter arrangements left to individuals are essentially bilateral. Figures presented above show that cotton exports are greatly handicapped under that system.

In view of heavy tariff restrictions on imports of manufactures from the cotton growers' best foreign customers and of the maze of international trade barriers, we stand in grave danger of losing the whole of our foreign market for cotton unless we change our policy. Foreign consumption of cotton last year was about 22,900,000 bales, and foreign production this year is estimated at over 20,000,000 bales. Either the tariffs must be lowered or multi-lateral trade agreements be arranged through exchange preferences to export the normal proportion of the usual crop. Brazil, for example, has an annual surplus dollar exchange on the United States of about $50,000,000. It is proposed to negotiate trade agreements whereby European nations will be given preference on that exchange in the sale of their manufactures to Brazil, provided they take dollar exchange

in payment for American cotton. As an emergency measure, the above policy will do two very important things: it will preserve our system of specialized production, for the home market, and increase foreign trade.

Would such an arrangement as suggested above cause a discrimination against American manufacturers? No. It will be to their advantage in that it will restore their market in the South, which is one of the best in the world, and in which they have virtually a monopoly; and, incidentally, it will forestall a strong movement to develop additional manufacturing in the South to employ idle labor caused by loss of foreign cotton markets.

The plight of the cotton growers may be summarized in three words, "low net income." Net income is a product of price times volume of sales less costs of production and marketing. In other words, our problem resolves itself down to a question of price, volume of sales, and costs.

Raise the Price of Cotton

The relative price of cotton now is ruinously low to the cotton growers, but, in view of the competitive situation, there is only one safe way to raise it, and that is through the improvement of quality. Supply and demand forces will do the rest if given an opportunity to function. It is wise for a country as well as an individual to make the best of its advantages. No country in the world has the equal of our system of experiment stations, scientific cotton breeders, and medium staple varieties of cotton. We have the most thorough knowledge of the qualities of our soil and the varieties of cotton adapted to them. Our ginning equipment is unrivaled, and our merchandising system is the best in the world. The United States has developed a system of carrying information to the farmers which is supposed to be the best; yet for lack of a sound program and a coördinated effort, the quality of our cotton in export markets is going down rather than improving. A sound cotton policy can and must provide for the effective coördination and use of all these agencies in improving the quality of our cotton.

Ways must be found (1) to assure an ample supply of good seed, (2) to see that the seeds are planted on soils and in regions best adapted to them, (3) to provide for one-variety community or regional production, and (4) to provide for the sale of cotton on its merits by farmers.

Lower Costs

Lowering costs is never a happy thing to contemplate. It means strong, concentrated effort and a revision or scrapping of old ways of doing things; but, notwithstanding all that, the surest way for the producer, ginner, or merchant to increase net income is to lower costs; and, under the present competitive conditions, it is the only safe way.

Cost of production in the long run is essentially a question of farm management. Farm management is essentially the proportioning and use of the factors of production—land, labor, and capital—in the production of economic values.

A program of soil conservation is important, but it is not an end within itself. Soil in the broad sense is a factor of production; and soil conservation means the effective use, not disuse, of it. In other words, a sound policy demands that the present soil conservation program be broadened to give proper weight to all factors in the individual farm production complex fitted into a sound national agricultural program.

New Uses

A strong program for the development of new uses for cotton must be an important phase in any effective cotton program. It is another way of expanding the market for cotton and of keeping the industry on a sound scientific basis, a thing of tremendous importance in these days of rapidly changing uses. This phase of the program should head up in a cotton research laboratory commensurate with the size and importance of the industry involved. Funds should not be spared in building and equipping it, and the best-trained scientists that money can hire should be employed to develop and run it. It must be big enough and strong enough to serve effectively, and command the confidence and coöperation of mills and of private research laboratories on one side and farmers and experiment stations on the other.

Farm Subsidies

Government subsidies of any description without a general public service to be accomplished are never justified. In order to secure a better balanced economy, the United States early in its history subsidized manufacturing with tariffs, which in effect offset the lure of cheap, and later, free land subsidies to farmers. Free land was virtually exhausted by 1900 and rising agricultural land values passed out of the picture with the World War, but the tariff-protected enterprises refuse to give up their subsidies. The only alternative to the elimination of tariffs, unless we are to have a very unbalanced economy in favor of industry, is an offsetting Federal subsidy for the unprotected parts of agriculture. In some cases agriculture can and does now receive the subsidy in a tariff; other agricultural products like cotton can get protection only through subsidy.

It would be unwise to give cotton growers a subsidy without their agreeing to follow a farm management program designed to lower their costs of production and increase the effective productivity of their farms, and to improve the quality of their products.

Subsidy payments, or crop quotas, should not be based necessarily on the farm's past record, but major emphasis should be placed on the effectiveness of the farm program in the region. In other words, the program should be flexible enough to concentrate the production of cotton and other farm enterprises in those areas which have the greatest relative advantage for it.

Since farm subsidies are given to offset the handicaps of the tariff and loss of markets, tariff revenues should be used to pay them. To attempt to finance the program with a processing tax will most certainly defeat the purpose of the program in that it will tend to destroy

the domestic cotton market through buyer resistance to higher prices.

Maintenance of Free Market

World markets, such as the cotton market, are extremely sensitive to artificial interferences because they destroy commercial values. It is highly important that Federal subsidy loans, or loans above market price, should be abandoned if we propose to hold our foreign markets for cotton. In addition to creating uncertainty in the market, loans above market price sustain the market for foreign competitors and force the acumulation of surpluses to plague American producers.

New Farm Cash Enterprises for the South

Cotton is the heart of the economy of the South, and it will and should continue to be so. On the other hand, there are some very definite threats to the cotton economy which to ignore would be the greatest folly. After we have done all we can, it is by no means certain that we will not be forced gradually out of foreign cotton markets. Prior to the World War, the United States furnished about 45 per cent of the commercial cotton consumed outside the United States. During 1936-37, the United States furnished only 23 per cent of it. That synthetic fibers are going to take an increasing toll of uses now devoted to cotton is very evident from the trend of production. The increase in production from 1935 to 1936 was the equivalent of about 500,000 bales of cotton. The normal or average annual rate of increase in world cotton consumption is only about 250,000 bales.

A sound cotton policy must include a strong program for discovering new crops and farm enterprises to take the place of retiring cotton acreage. These should be peculiarly adapted to Southern climatic and soil conditions and as nearly non-competitive with crops and products being produced in other regions as possible.

A. B. Cox.

Pulp and Paper Industry in the South

An Industrial Revolution Based on the Use of Southern Pine

The almost spectacular growth and extension of the Kraft pulp and paper industry during the past decade has drawn the attention of paper men to the possibilities of the Gulf and Atlantic Coastal Plain States which before the World War had hardly begun the manufacture of paper from Southern pines. Today the Kraft paper industry in the South stands out as an established and as a substantial industry. It may be asked how has this come about and what are the factors concerned? First, it is of importance to note that the modern paper industry dependent upon wood pulp as a raw material is less than a century old; in fact, most of the growth of the paper industry has come about since 1880; and, moreover, that in 1900 the pulp and paper industry of Canada, which is now so important in that country, had attained only modest beginnings.

The Chemist and Pulp Production

Except for newsprint (which is about 80 per cent groundwood—a mechanical pulp—and the rest sulphite pulp) most of the pulp of today is prepared by chemical processes. Chemical pulps are referred to as soda, sulphite, or sulphate pulps, according to the chemical process used; furthermore, each chemical process is most readily used with certain sources of pulpwood—spruce and hemlock, northern pines, certain hardwoods and the like. Kraft pulp is made by the sulphate process which was the last of the chemical processes to be discovered and was first made in 1884 by C. F. Dahl in Danzig, Germany. The first mill in North America to manufacture Kraft pulp was established in Quebec, and it commenced operations in 1907. By the use of the sulphate process longer wood fibers are left in the pulp and consequently the paper has extraordinary strength, thus the name Kraft (German for strength). Though the paper is brown, its strength and toughness make it admirably suitable for wrapping paper, for liners of paperboard, paper bags, and the like. Moreover, the production costs are comparatively low, and this is obviously an item of great importance. The sulphate process, however, was not immediately applicable to the Southern pines. But in 1911 Ed Mayo, now with Union Bag and Paper Company, made the first successful run of Kraft pulp from Southern pine by the sulphate process in the little paper mill which was then in operation at Orange, Texas.

The successful application of the sulphate process to Southern pines marks the beginning of that revolution in the paper industry which is still continuing—the establishment of Kraft paper production in the South.

Forest Industries Have Always Been of the Move

In order to appreciate the geographic shifts of the paper industry, it may be profitable to glance in perspective at the lumber industry of this country, because lumbering, like the paper industry, is dependent upon forests. The commercial lumber industry, beginning on a large scale in New England, had begun to migrate westward by 1850; in 1850 New York led in output but in 1860 had given way to Pennsylvania. At the beginning of the 1870's the Lake States were well in the lead—a leadership they held until 1892. During this later period lumbering operations were advancing over the South and in 1890 the Southern Pine region furnished 20 per cent of the lumber output of the country. The South held the leadership in lumber production down to the 1920's; in 1919 it supplied nearly 47 per cent of the lumber cut of the United States. By 1929, however, the Pacific Northwest had reached first place—a little ahead of the South, and a decade ago these two sections together were supplying more than 85 per cent of the lumber cut.

During the first decade of this century, however, a drastic change began to affect the United States lumber

industry. Lumber production had steadily risen from an output of nearly 13 billion board feet in 1868 to 35 billion in 1899; in 1907 lumber output reached its peak when more than 45 billion board feet were cut by some 44,000 saw mills. The South reached its peak in 1909 with an output of 20 billion board feet. By 1930 lumber production had fallen to 26 billion board feet, and it decreased to less than half of this during the depression.

The modern paper industry in the United States began in New England. Like the lumber industry, the first mill established in North America was in New England, at Curtisville, Massachusetts, which began operations in 1876 and used groundwood. As the pulp and paper industry outgrew the bounds of New England some of it moved westward into Wisconsin, but since 1900 most of the new expansion has taken place in Canada; that is, until the recent expansion in the Cotton Belt States.

Soon after 1900 Canada became the leading exporting country for these products. In 1890 the total Canadian exports of pulp and paper were valued at only $120; in 1924 the value of these exports had risen to approximately 120 million dollars. The pulp and paper industry had become the largest manufacturing industry in Canada. In a summary of the industry written in 1924, C. D. Howe, Dean, Faculty of Forestry, University of Toronto, stated: "The pulp and paper industry has established thriving towns in the wilderness; it has produced an enormous volume of business; it has created millions in new wealth; its development in the past 25 years is one of the romances of modern industrialism."

Pulp and paper mills were established in the Pacific Northwest but high costs of transportation to the Eastern markets constituted a serious disadvantage; however, this northwestern region has now an export trade in these products to the Orient and it has the distinction of being the only region in the United States producing pulp for export. A considerable part of the United States scheduled expansion in sulphite pulp production for 1938 is to be in the Pacific Northwest. These pulp exports are of a grade suitable for the production of rayon and currently most of them go to Japan.

World-Wide Expansion of Paper Production Since 1880

Of primary importance to the modern paper industry are the types of raw materials (forests), the accessibility of these raw materials, the technical processes available throughout the industry, and the types of pulp desired. Upon the availability of suitable combinations of these factors has depended the growth of the paper industry, which has advanced at a prodigious rate during the past 60 years. The volume of consumption of pulp has risen from a few tons made experimentally little more than a half century ago to a world total of 23 million tons in 1936—a volume 64 per cent greater than in 1925 and 21 per cent larger than in 1929. The United States consumes almost half of this total, but not only is the United States the leading consumer, it is also the leading importer.

But why the current interest in this industry? For one thing, there has arisen an acute shortage in sulphite pulp, which is high-priced and is made only from spruce and hemlock; another factor has been the sudden rise of the Kraft pulp and paper industry in the South, which has focussed attention upon the vast supplies of rapidly growing and readily accessible pines of the Gulf and Atlantic Coastal Plain; and, furthermore, new technologic advances have been worked out so as to better handle the Southern pines in paper making.

Kraft Production Centers in the South

Obviously, the outstanding development in the paper world during the past decade has been the rise of Kraft paper and paperboard production in the South. In 1926 when Kraft pulp production was just getting started in the South, Kraft pulp comprised 19 per cent of the total pulp production of the United States; in 1936 Kraft pulp amounted to nearly a third of our total pulp production. During this ten-year period Kraft pulp output increased by 260 per cent; during the same period other pulp production increased only about 80 per cent—all of which represents a vast increase for a depression period. Kraft pulp has not always been taken seriously even by the paper industry; and until recently, the possibilities of the South as a source of paper has been more or less discounted. But it has been estimated that in 1936 Kraft pulp production amounted to 1,900,000 tons; of this amount some 40 per cent was used in making paperboard, 30 per cent for paper bags, 20 per cent for wrapping paper, and 10 per cent for miscellaneous products.

The increasing consumption of Kraft pulp has brought about a large expansion program; and by the beginning of 1939 there will be in operation in the South ten new mills in addition to the 22 that were in operation in 1936. It has been estimated that these ten new mills will add approximately one million tons annually to Kraft pulp production in this country. Southern Kraft Corporation, an important subsidiary of International Paper and Power Company, is building at Georgetown, South Carolina, the largest Kraft mill in the world with a daily capacity of 625 tons. Union Bag and Paper Company's first unit at Savannah, Georgia, with a daily capacity of 125 tons, began operating in September, 1936; a second unit with the same capacity started in the spring of 1937, and the third unit also of the same size as the others is scheduled to begin operations this month. This fully integrated plant includes a Kraft pulp and paper bag factory. Container Corporation of America is completing its 125-ton Kraft pulp mill at Fernandia, Florida; this mill is designed to supply the entire sulphate requirement of that company.

The St. Joe Paper Company, owned jointly by the Alfred E. DuPont estate and Mead Corporation, is constructing a 300-ton Kraft paper mill at St. Joe, Florida. This plant is to manufacture Kraft liner board used in paper containers. Mead Corporation, together with Scott Paper Company, is building the first unit of a 150-ton plant at Brunswick, Georgia. This plant will produce bleached sulphate and is expected to supply a quarter of Mead's and about a third of Scott's sulphate requirements. The West Virginia Pulp and Paper Company is building a 250-ton plant at Charleston, South Carolina, to make liner board. Still other plants are under construction and some old ones are being enlarged. One of the most striking new things in the Southern paper industry is that after years of experimental work the

Champion Paper and Fiber Company has developed what has been claimed to be an entirely new process of using bleached sulphate pulp for book and magazine paper. A significant feature of this process is that the bleaching does not destroy the pronounced strength of the long fiber sulphate pulp. Champion's new pulp mill near Houston, Texas, with a daily capacity of 165 tons was built to supply most of the pulp requirements of Champion's plant at Hamilton, Ohio.

The Cotton Kingdom Is Brought Under the Aegis of Modern Industry

The factors directly concerned in the location of Kraft pulp and paper in the South are numerous; among these are such major items as the availability of raw materials, power, water, and labor, the comparative capital requirements, and markets. Although this list covers the major items which are concerned in locating the pulp and paper industry in the South, yet a broad view of the situation reveals many other items of significance.

For more than a century the South has been regarded as the Cotton Kingdom—and it was such, in spite of the fact that the rank and file of its people had not so very much at the close of the season to show for labor expended in growing cotton. The rise of the pulp and paper industry in the Old South is somewhat comparable to the rise of the oil industry after 1900 in the cotton states west of the Mississippi River; less spectacular than oil though they are, the new forest-using industries can be maintained in the South for decades after the United States will possibly be getting its oil products from coal or oil shale.

Forests in the humid South constitute a secure resource; and since these forests will no doubt become more valuable, it is reasonable to expect that conservation measures will be furthered to maintain and to expand the yield of forest growth in the South. The growth of the pulp and paper industry in the South is also somewhat comparable to the recent expansion in the canning industry, including the manufacture of cans, in the South. Still another industry with which it might be compared is the manufacture of vegetable oil products in the South, based upon cottonseed as the raw material and which also has been made feasible by the application of recent advances in technology. All of these industries are spread far and wide throughout a vast producing section of the nation.

Rather different are the recent developments of the chemical industry based upon the use of non-metallic minerals in the South; and it is of importance to note that these chemical industries are especially interested not only in the expansion of the pulp and paper industry in the South, but also in a host of other industries, such as glass, ceramics, fertilizers, and the like. To sum up: Since modern industry is very closely interrelated; the greatest amount of substantial industrial progress requires progressive advancing along several lines at the same time. Furthermore, industries progressively advancing usually create markets for a wide variety of other products which in most industrial regions are supplied from near at hand—supplemental manufacturing industries, population following industries, etc. Moreover, the finished product of many manufacturing industries is but the raw material for still other industries—e.g., the manufacture of paper bags uses finished Kraft paper as its raw material. In this connection, one other item needs re-emphasis. Communities as well as regions sense very strongly the need for manufacturing industries. Unless the United States wants a peasant agriculture, it is the opinion of those well-qualified to speak on the subject that further expansion of jobs and of wage earnings is dependent upon the further geographic dispersion of manufacturing industries.

Thus is the pulp and paper industry in the South not to be regarded as just another industry, important in itself though that may be. It is part and parcel of a widespread movement; it is one expression of the effects of those transforming forces that were set into motion by the steam engine a century and a half ago and which now have become virtually all-inclusive the world over in their quests for raw materials and in their drives for markets.

Advantages of the South for the Pulp and Paper Industry

The location of a large proportion of these new plants on the Atlantic and Gulf coasts demonstrates the peculiar importance of water transportation to the pulp and paper industry. Locations in the interior, such as those in northern Louisiana and southern Arkansas reflect the pull of other conditions, such as raw material, low-cost fuel, etc. The much heralded large supplies of quickly growing Southern pines is without question the determining factor in the trek of paper mills into the Old Cotton Belt; and this trek began just as soon as technology had made these vast reserves of low-cost woods available for pulp making. It has been estimated that Southern pine costs from $5.00 to $5.50 a cord, or even less, in contrast to $10.00 to $12.00 for spruce. Timbering operations can be continued throughout the year in the South, thus eliminating the large inventories and handling problems that add to the costs in Northern mills. Generally, low-cost fuel is available in the South, and in addition, the same forests supplying wood pulp may also be used to produce turpentine and resin.

From the longer point of view, however, the large area adaptable to pines in the South and the fact of their rapid growth because of the prevailing climatic conditions constitute the fundamental advantage of the Southern paper industry. That a 20-year Southern pine is comparable to a 40- or 80-year spruce or hemlock is a conservative estimate of the rapidity of growth of pines in the Cotton Belt. Such rapidity of growth makes possible a continuous wood supply near the mill which thus reduces greatly the costs of transportation which invariably bring about increasing costs to Northern mills.

Forest growth is slowest in Canada; but even in New England the annual cutting and destruction of timber in pulpwood producing areas was, a few years ago, two and a half times the amount added by annual growth. This means that in the northern forests the pulpwood supplies continuously recede from the mills, and consequently the northern mills have to bear the costs of increasingly longer hauls.

On a basis of the yearly growth or increment of Southern pines (three-fourths of a cord per acre) the

total capacity of Southern mills and those under construction, with a combined annual capacity of three million tons, would require less than twenty million acres of pine forest for a continuous supply of pulpwood. And, it may be noted, the Forest Products Laboratory has estimated that with fire protection the annual increment of growth of Southern pines can be as high as two cords per acre. Furthermore, the United States Forest Service estimates that the South has one hundred forty million acres of forest land in the nine forest states. These data unmistakably point to the fact of the large forest reserves of the South; furthermore, the rapid growth of trees in the South serves to accentuate to a substantial degree these reserves.

Briefly stated, the successful bleaching of sulphate or Kraft pulp points to new potentialities for pulp from Southern pines. Already considerable attention is being given to the use of Southern pulp for purposes hitherto considered as a sort of monopoly of sulphite pulp. The possibility of newsprint from Southern pines is another element to which the paper industry is giving consideration. But, it should be pointed out, the Southern paper industry is not confined to the manufacture of wrapping paper or of materials for the making of paper bags, important though these items are. The fact that Union Bag and Paper Company has established a ten million dollar plant at Savannagh, Georgia, reflects the interest of that industry in the South. In addition to wrapping paper and paper bags, Kraft paper is also used in making building paper, carpet linings, and liners (the outside layer of paperboard). Kraft board is a heavier grade of Kraft paper used in the making of container boxes, corrugating material, insulation, hard fiberboard and cartons.

ELMER H. JOHNSON.

Financial

From a financial viewpoint, the most significant developments of the past month have been the continued severe decline of the security markets, the latest upward revision of Federal Treasury deficit estimates, and a further relaxation of Reserve Bank regulations governing rediscounts.

Both stock and bond prices continued to decline during the month under review, stocks displaying exceptional weakness. Since August 14, the Dow-Jones average of 30 industrial stock prices has dropped some 65 points, falling from 190.02 to 125.73 on October 18. Railroad and utility stock prices have displayed similar weakness since July 24. The combined average (Dow-Jones) of 70 stock prices has fallen from 64.81 on August 14 to 41.52 on October 18, the lowest level reached in some two years.

Numerous explanations of this severe reaction have been advanced. Probably the most important single factor bearing on stock prices has been the increasingly unfavorable business outlook for the immediate future with its accompanying prospect of diminished corporate earning power. Since August, evidence of a contra-seasonal general business recession has been accumulating. Such important indexes as freight car loadings, steel ingot production, building and construction contracts, and electric power production have turned distinctly downward. Accompanying this situation has been a continuing trend toward rising corporate operating costs and narrowing net profit margins. Further clouding the outlook is President Roosevelt's announced intention to press for early enactment of industrial "wage-hour" legislation, which would involve an additional increase in labor costs.

A second factor contributing to the current stock market weakness is the unusual "thinness" of the market which tends to exaggerate price declines. This thinness apparently results from the numerous government regulations imposed on security trading which appear to have driven many traders, especially of the professional variety, from the market. Among these regulations are: high initial margin requirements, high tax rates on capital gains, barriers to trading by officers and directors in the stocks of their own corporations, and restrictions placed upon floor trading by stock exchange members. As a result of the diminished trading volume, a comparatively small amount of selling pressure produces an unusual decline in prices. It is probably correct to say that, as an indicator of market trend, a price change of three points today has about the same significance as a change of one point two years ago.

Pressure on the Federal Reserve Board to reduce margin requirements has already developed. Should stock prices continue weak for a short time further, it is quite probable that a reduction in margin requirements will be ordered, thus providing at least a temporary rallying basis. It will be recalled that the Treasury some weeks ago ordered $300,000,000 of "sterilized" gold to be sold to the Federal Reserve Banks in order to maintain money market ease.

Bond prices have moved somewhat in sympathy with stocks. From a level of 101.79 on July 26, the Dow-Jones average of 40 high grade bond prices has declined with slight interruptions to 94.26 on October 18, a shrinkage of some six and one-half per cent. More recently, Treasury bonds have shown indications of weakness, being adversely affected by the President's October budget estimates forecasting a greater deficit than was last anticipated. Should Treasury obligations continue soft, it seems certain that the Federal Reserve Banks will undertake an open market buying campaign to support that market.

Effective October 1, the Federal Reserve Board established new regulations governing rediscounts to member banks. Requirements governing the eligibility of paper for rediscount were greatly relaxed. Added to the eligible list were short term notes and drafts representing installment sales of a commercial character and loans to finance the construction of farm and residence buildings. Even more revolutionary is the permission granted to member banks to borrow on their promissory

notes collateraled by any securities eligible for national bank investment including loans secured by stocks. These regulations, in effect, permit member banks to use any sound assets which they possess as a basis for securing central bank credit, and authorize the Reserve Banks to extend credit directly to finance stock market speculation. The original theory that Federal Reserve Bank credit should be restricted to the legitimate needs of business and agriculture, therefore, has been completely discarded. Needless to say, these changes violate well established canons of sound central banking policy.

Commercial banking trends developed during the month about as was anticipated. Commercial and agricultural lending expanded somewhat in accordance with the normal seasonal pattern, and demand deposits revealed some shrinkage, reflecting to some extent the expected expansion of currency in circulation. Aggregate commercial and farm loans of the reporting member banks rose from $4,688,000,000 on September 8 to $4,831,000,000 on October 6. Over the same period loans to security brokers and dealers declined very slightly. Total demand deposits (adjusted) of the reporting member banks decreased from $14,811,000,000 on September 8 to $14,628,000,000 on October 6. To meet the usual autumn seasonal needs, currency in circulation (unadjusted) has expanded from $6,424,000,000 on July 28, to $6,585,000,000 on October 13.

It is probable that commercial bank lending will continue to expand during the next two months despite the recession in business activity. To meet this expected demand for credit as well as the needs of depositors for additional currency, it is likely that the banks will engage in some further selling of government obligations now held in their portfolios. During the period from September 8 to October 6, the reporting member banks reduced their holdings of such securities from $9,322,000,000 to $9,042,000,000. Despite the fact that excess reserve balances of all member banks were estimated at $990,000,000 on October 13, the loanable funds of many individual banks are low at present. To meet any material demand for customer credit, such banks must either liquidate government bond holdings or borrow from the Reserve Banks. It seems likely that they will prefer the former procedure. Regardless of this situation, however, the existence of approximately $1,000,000,000 in excess reserve balances together with the Federal Reserve Board's determined easy money policy all but guarantees low interest rates for some time to come.

J. C. DOLLEY.

The Manufacture of Egg Products in Texas

Certain areas in the State of Texas are particularly adaptable for large-scale production of poultry and eggs, but if the industry is to increase greatly in commercial importance it is necessary that local industries must be developed which will absorb the surplus production of eggs, especially during seasons when fresh eggs cannot be shipped to distant markets at prices profitable to the producer. For this reason, the establishment of egg processing plants in Texas has gained the attention of farmers and manufacturers alike during the last few years.

Although the processing of eggs in Texas began more than twenty years ago, the industry has developed slowly in proportion to the potentialities afforded by the extensive areas in this State suitable for poultry raising. Texas egg products, however, must be sold mostly in out-of-state and foreign markets, and it is necessary that plants manufacturing such products in Texas employ the most modern methods of production in order that their products might compete successfully in cost and quality with those now being offered in world markets.

For many years millions of pounds of egg products have been imported annually into the United States from China, and the demand for Chinese egg products has continued, principally because of the lower prices made possible by the lower costs of production and manufacturing in that country as well as the fact that the imported product was, until recently, considered superior to the domestic product in quality. For instance, although the United States exported only 2,097,986 dozens of eggs in the shell during 1936, according to the preliminary report of the United States Department of Agriculture, 8,568,538 pounds of processed eggs, that is, whole eggs dried, yolks dried, yolks frozen, and egg albumen dried, were imported from China last year, besides the small amount of 29,000 pounds imported from other foreign countries. Frozen eggs and dried egg products exported from the United States during 1936 totaled only 84,684 pounds and were shipped mostly to various parts of the United Kingdom, Western European countries, Mexico, and the tropical countries.

Because of the fact that the principal egg producing sections of the United States have an average summer temperature ranging from 70 degrees F., to 90 degrees F., and it is necessary that eggs should be kept at a temperature not above 68 degrees F., the eggs must be shipped in refrigerated cars or other artificially cooled carriers, or so processed that they may be kept without refrigeration. This means that eggs shipped any great distances must be handled as cold storage eggs or removed from the shells and frozen, either with the whites and yolks separate or in one container; or that the fresh eggs must be processed in nearby plants and shipped in dry or powdered forms which do not require refrigeration.

At present more than 50 per cent of the eggs exported to tropical countries from the United States are dried or frozen, not so much because of a preference of the trade in those countries for processed eggs, but because of the greater convenience in handling, the lower cost of transportation, and a general lack of proper refrigeration systems in most retail stores in those countries. While production of eggs is increasing in Porto Rico, Cuba, and the Central American countries, the local production is marketed as fresh eggs; and each succeeding year has witnessed an increased demand for

egg products from the United States for use in bakeries, confectioneries, and even for use in the homes in those countries.

Texas supplies a large proportion of the eggs imported into Mexico, which are shipped mostly as cold storage eggs. Texas poultry and egg producers now recognize that there is a valuable potential market for processed eggs in Mexico, especially as modern methods of manufacture have made it possible to process eggs in canned or dried forms which equal fresh eggs in food value. The consumption of egg products in Mexico has increased as eggs are more widely used as a substitute for meat, and as certain advantages of using dried eggs are better understood by merchants, bakers, ice cream manufacturers, etc., as well as consumers.

The United States is the leading egg producing country in the world, and according to a study made by Mr. Stewart E. McMillin, American Consul to Poland in 1931, in Poland and in Germany there is approximately one hen per inhabitant; in Holland there are three hens per inhabitant, and in the United States six hens per inhabitant. The consumption of eggs, it is said, amounts to 200 per person in the United States, 120 in Germany, and in Poland 60 eggs per person annually.

Western Europe is a large consumer of eggs, which form an important food item in all European countries. Germany is the second largest egg market in the world, exceeded in this respect only by England. Both these countries import large quantities of dried eggs from China. Chinese eggs have had to improve in quality as restrictions in international trade have become more rigid; and if the United States is to build an important egg trade with Europe, products must be manufactured to meet the most exacting demands.

Today, however, the improved processes of American manufacturers make possible the production of dried egg products which are claimed to be superior in quality to the improved product. The new type of drying equipment used in modern American factories dries eggs under more sanitary conditions than those usually found existing in the older plants, particularly in China, and requires but a minute fraction of the time consumed by the old methods. The process used almost entirely in China until about 1930, and still in use in nearly all the smaller plants, is referred to as the "native process" and consists of drying the yolks, or the fermented egg whites, on steel, aluminum or glass trays in heated chambers; completing the drying by air, and finally, crushing the dry product into flakes or grains—in all, requiring from five to seven days to complete.

The modern system now largely used, includes spraying the fresh egg whites into a blast of hot air, collecting the finely divided or atomized product in powder form as it falls to the bottom of the bin, running the dry powder into a hopper, and packing it into barrels, heavy paper bags, or metal containers. The complete process requires but a few minutes for the manufacture of the dried egg whites and a slightly longer time for the processing of the egg yolks.

For many purposes it has been found that eggs processed in modern plants are equal to, and for certain purposes superior to, fresh eggs. The powdered white, for instance, is said to be more economical than the fresh whites, especially since it produces proportionately more meringue, used extensively by bakeries, and produces bakery products of better keeping qualities than those using fresh eggs. Standardized, ready-mixed egg powders are now offered for bakeries, confectioneries, and other consumers in a wide variety of forms, which are gaining wider acceptance each year, based on uniform quality and food value. The older methods of egg drying using fermentation left a characteristic taste and odor, which disadvantages are now entirely overcome by the modern process, and the original blandness of the fresh egg is retained.

Not only have better organization and more extensive research been used to improve the manufacturing processes of egg products, but at the same time the food value of eggs, both fresh and processed, has become better understood. Furthermore, the greater economy in time and labor so reduces the cost of production that the American manufacturer is enabled to pay the prevailing market price for eggs and still compete with the imported products; although the Chinese can buy eggs for three or four cents a dozen and employ skilled labor at a correspondingly low wage scale.

Eggs, like milk, are also a foundation food in that they contain a very large number of the minerals and vitamins necessary for a balanced diet; they form the best substitute for meat, and can now be processed profitably in concentrated form and yet retain practically all the food value of fresh eggs. The special advantage of reduction in bulk, and the fact that the dried egg products do not require refrigeration and special care in handling, make it possible to market dried eggs in package form.

Packaging of ready-prepared foods has been an important factor in increasing the sale of many types of foods, such as ice cream mix, malted milk powders, mixed flours, etc. Because of the unusual keeping qualities of dried egg products as now manufactured, it has been found that they are especially adaptable for retailing in packages, either as dried egg products or combined with other foods as an ingredient in prepared mixtures. As the tendency away from home cooking, and especially home baking, increases extensive advertising and better retail distribution methods will no doubt produce a greater consumer demand for egg products for domestic consumption, as well as in those countries and sections where requirements necessary for the care of fresh eggs are not always available.

Texas egg breaking plants report that they usually operate from the first of March to the first of July. At present the principal operation used in Texas plants consists of freezing eggs, either mixed or separating the whites and yolks. The products are packed in ten, twenty, or thirty-pound cans and distributed to bakers, ice cream manufacturers, candymakers, etc., throughout the United States. The daily capacity of Texas factories varies, depending somewhat on whether the eggs are packed whole or with the whites and yolks separate, but the plant average is usually about 600 cases per day in the larger plants.

A total of nine plants reported canning, breaking, or drying of eggs in Texas in 1936. Some of these, how-

ever, have been discontinued and others closed temporarily, since the industry in Texas is still highly seasonal. In March 1937 only three plants were reported in operation in Texas, with a total of 104 plants for the country as a whole, or in the 25 states listing egg processing factories; of this number 10 plants are located in California and 10 in New York, while most of the others are in northern or mid-western states.

In 1935 Texas ranked seventh among the States of the Union in the production of eggs, and had a total cash income from that source of $13,013,000 compared with $9,527,000 for 1934. The only live stock and livestock products marketed in Texas in 1935, which exceeded in value that of eggs, were cattle and calves, milk, and wool.

Shipments of eggs from Texas to out-of-state points decreased from 1,449 cars in 1931 to 764 cars in 1936, according to a report compiled by the Bureau of Business Research in coöperation with the Division of Crop and Livestock Estimates of the United States Department of Agriculture. Shipments in 1936, however, showed an increase of 234 cars over the shipments for 1935. Since production of fresh eggs is heaviest during the months of February, March, April, and May, shipments are correspondingly larger and prices relatively lower during these months. For example, during 1936 monthly carload shipments of eggs from Texas and the average price per dozen for each month were as follows:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Number of Cars Shipped	54	121	155	91	80	75	35	40	33	32	29	19
Cents per Dozen Eggs	19	20	14	14	16	15	18	19	24	26	31	29

Eggs in the shell exported from the United States declined from 18,579,000 dozens in 1930 to 1,812,000 dozens in 1935; while imports of eggs in the shell showed a small increase from 317,000 dozens in 1930 to 432,000 dozens in 1935. Exports of eggs in the shell for 1936 amounted to 2,097,000 dozens and imports totaled 346,000 dozens, representing a decline in imports of 86,000 dozens from 1935.

Improved breeding strains and better methods of producing and marketing eggs in this State are increasing the income from poultry farms in Texas, but there is already a keenly felt need of other egg processing plants to take care of that part of the production which cannot be marketed profitably during the season when production is heaviest. The output of egg breaking plants in the United States has shown a consistent increase this year over the corresponding months in 1936, reflecting the increased demand of American manufactured egg products, and, to some extent, the effects of present conditions in China.

CLARA H. LEWIS.

Subscription to the

TEXAS BUSINESS REVIEW

$1.00 per year

PETROLEUM

Daily Average Production

(In Barrels)

	Sept. 1937	Sept. 1936	Aug. 1937
East Central Texas	116,900	62,800	127,900
East Texas	477,400	435,210	471,900
Gulf Coast ¶	217,450	253,920	225,650
North Texas	73,850	61,090	75,050
Panhandle	78,950	61,370	80,750
Southwest Texas	269,100	85,620	271,750
West Central Texas	33,550	26,990	33,650
West Texas	223,000	172,320	238,200
STATE	1,490,200	1,159,320	1,524,850
UNITED STATES	3,656,850	3,016,850	3,707,650
Imports	157,893	166,057	183,750

¶Includes Conroe.
NOTE: From American Petroleum Institute.
See map on cover showing the oil producing districts of Texas.

Gasoline sales as indicated by taxes collected by the State Comptroller were: August 1937, 107,118,000 gallons; August 1936, 98,377,000 gallons; July 1937, 111,122,000 gallons.

LUMBER

(In Board Feet)

	Sept. 1937	Sept. 1936	Aug. 1937
Southern Pine Mills:			
Average Weekly Production per Unit	296,629	312,762	310,073
Average Weekly Shipments per Unit	303,002	346,881	305,063
Average Unfilled Orders per Unit, End of Month	649,921	736,589	667,653

NOTE: From Southern Pine Association.

TEXAS CHARTERS

	Sept. 1937	Sept. 1936	Aug. 1937†	Third Quarter 1937	Third Quarter 1936
Domestic Corporations					
Capitalization‖	$2,034	$1,639	$4,034	$8,120	$5,521
Number	103	123	142	378	383
Classification of new corporations:					
Banking-Finance	8	5	8	16	13
Manufacturing	17	19	26	67	72
Merchandising	27	30	41	104	91
Oil	17	38	30	78	96
Public Service	2	1	2	4	6
Real Estate-Building	7	4	12	30	31
Transportation	1	1	1	4	3
All Others	24	25	25	75	71
Number capitalized at less than $5,000	34	55	49	139	158
Number capitalized at $100,000 or more	4	3	10	19	9
Foreign Corporations (Number)	31	31	37	105	96

†Revised.
‖In thousands.
NOTE: Compiled from records of the Secretary of State.

SEPTEMBER SHIPMENTS OF LIVE STOCK CONVERTED TO A RAIL-CAR BASIS§

	Cattle		Calves		Hogs		Sheep		Total	
	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936
Total Interstate Plus Fort Worth¶	3,996	2,529	1,830	857	638	354	1,240	507	7,704	4,247
Total Intrastate Omitting Fort Worth	787	606	144	108	45	51	664	204	1,640	969
TOTAL SHIPMENTS	4,783	3,135	1,974	965	683	405	1,904	711	9,344	5,216

TEXAS CAR-LOT§ SHIPMENTS OF LIVE STOCK, JANUARY 1 TO OCTOBER 1

	Cattle		Calves		Hogs		Sheep		Total	
	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936
Total Interstate Plus Fort Worth¶	45,232	29,203	8,190	5,265	5,890	5,132	9,179	3,606	68,491	43,206
Total Intrastate Omitting Fort Worth	6,473	5,615	1,156	1,036	444	346	1,361	513	9,434	7,510
TOTAL SHIPMENTS	51,705	34,818	9,346	6,301	6,334	5,478	10,540	4,119	77,925	50,716

§Rail-car Basis: Cattle, 30 head per car; calves, 60; hogs, 80; and sheep, 250.

¶Fort Worth shipments are combined with interstate forwardings in order that the bulk of market disappearance for the month may be shown.

NOTE: These data are furnished the United States Bureau of Agricultural Economics by railway officials through more than 1,500 station agents, representing every livestock shipping point in the State. The data are compiled by the Bureau of Business Research.

RETAIL SALES OF INDEPENDENT STORES IN NEW MEXICO, OKLAHOMA, AND TEXAS

	September 1937				Year-to-date 1937		
	Number of Firms Reporting	Dollar Sales	Percentage Change in Dollar Sales from Sept. 1936	Percentage Change in Dollar Sales from Aug. 1937	Number of Firms Reporting	Dollar Sales	Percentage Change in Dollar Sales from Year-to-Date 1936
TOTAL (New Mexico, Oklahoma, and Texas Combined)	1,341	20,833,556	+10.0	+13.4	826	131,212,058	+ 6.8
NEW MEXICO	74	733,778	+ 2.3	−12.8	41	5,297,794	+13.4
OKLAHOMA	296	3,238,851	+11.1	+15.5	198	19,584,839	+ 3.9
TEXAS	971	16,860,927	+10.1	+14.4	587	106,329,425	+ 7.1
TEXAS STORES GROUPED BY LINE OF GOODS CARRIED:							
APPAREL	140	2,948,317	+16.6	+50.0	88	15,019,081	+12.0
Family Clothing Stores	31	298,577	+16.2	+43.2	22	1,427,788	+ 4.3
Men's and Boys' Clothing Stores	54	990,610	+12.3	+40.3	35	5,420,306	+11.1
Shoe Stores	19	185,523	+11.0	+78.2	9	841,740	+ 9.0
Women's Specialty Shops	36	1,473,607	+20.6	+55.5	22	7,329,247	+36.1
AUTOMOTIVE	131	3,688,135	+ 5.5	−15.6	87	27,551,677	− 0.6
Filling Stations	31	135,595	+12.2	− 0.1	21	849,411	+ 8.6
Motor Vehicle Dealers	100	3,552,540	+ 5.2	−16.1	66	26,702,266	− 0.8
COUNTRY GENERAL AND FARMERS' SUPPLIES	97	596,723	+ 4.4	+ 0.7	69	4,102,654	+15.3
DEPARTMENT STORES	66	5,964,322	+10.5	+40.8	46	39,306,399	+ 9.1
DRUG STORES	154	558,749	+ 8.6	+ 5.3	112	3,141,999	+ 4.7
FLORISTS	42	44,039	+24.2	+ 2.6	—	‡	—
FOOD	144	1,049,858	+ 7.4	+ 2.6	94	5,745,974	+ 9.5
Grocery Stores	37	201,106	+ 6.9	+ 1.1	22	1,175,006	+ 8.8
Grocery and Meat Stores	107	848,752	+ 7.6	+ 2.9	72	4,570,968	+ 9.6
FURNITURE AND HOUSEHOLD	43	670,216	+10.7	+ 0.3	25	3,779,470	+ 5.1
Furniture Stores	32	537,254	+ 3.5	− 1.5	18	3,087,216	+ 2.1
Household Appliance Stores	6	90,186	+82.5	− 3.0	—	‡	—
Other Home Furnishings Stores	5	42,776	+16.6	+44.0	7	692,254	+20.6
JEWELRY	54	211,192	+36.7	+20.5	6	153,700	+14.0
LUMBER, BUILDING, AND HARDWARE	67	946,299	+11.1	+ 1.2	43	6,562,825	+15.2
Hardware Stores	34	400,495	+22.7	+14.1	23	3,073,072	+22.9
Lumber and Building Material Dealers	33	545,804	+ 3.9	− 6.6	20	3,489,753	+ 9.3
RESTAURANTS	20	93,629	+ 0.5	− 4.3	11	495,439	+ 2.4
ALL OTHER STORES	13	89,448	+ 2.8	− 5.0	6	470,207	+ 8.9
TEXAS STORES GROUPED ACCORDING TO POPULATION OF CITY:							
All Stores in Cities of—							
OVER 100,000 POPULATION	209	9,192,725	+ 8.5	+19.7	139	62,612,125	+ 6.5
50,000–100,000 POPULATION	94	1,559,501	+11.3	+17.5	52	8,991,474	+10.9
2,500–50,000 POPULATION	466	4,964,039	+13.2	+ 7.9	261	27,390,330	+ 7.1
LESS THAN 2,500 POPULATION	202	1,144,662	+ 8.3	+ 1.6	135	7,335,496	+ 7.1

‡Not available.

NOTE: Prepared from reports from independent retail stores to the Bureau of Business Research, coöperating with the United States Department of Commerce.

SEPTEMBER CARLOAD MOVEMENT OF POULTRY AND EGGS

	Cars of Poultry: Live Chickens		Live Turkeys		Dressed Chickens		Dressed Turkeys		Cars of Eggs	
	1937	1936	1937	1936	1937	1936	1937	1936	1937	1936
Shipments from Texas Stations										
TOTAL	3	...	...	...	31	20	...	2	38	33
Intrastate	...	...	...	...	1	2	...	2	12	7
Interstate	3	...	...	...	30	18	...	...	26	26
Receipts at Texas Stations										
TOTAL	...	...	...	...	...	...	1	1	16	32
Intrastate	...	...	...	...	...	...	1	1	11	6
Interstate	...	...	...	...	...	...	...	...	5	26

NOTE: These data are furnished the U. S. Department of Agriculture, Division of Crop and Livestock Estimates, by railway officials through agents at all stations which originate and receive carload shipments of poultry and eggs. The data are compiled by the Bureau of Business Research.

TEXAS COMMERCIAL FAILURES

	Sept. 1937	Sept. 1936†	Aug. 1937	Third Quarter 1937	Third Quarter 1936†
Number	4	11	13	34	35
Liabilities‖	$318	$137	$1,070	$1,615	$412
Assets‖	$ 77	$ 36	$ 35	$ 169	$ 92
Average Liabilities per Failure‖	$ 80	$ 12	$ 7¶	$ 19¶	$ 12

†Revised.
¶Does not include figures for one firm with liabilities of $980,000.
‖In thousands.
NOTE: From Dun and Bradstreet, Inc.

COMMODITY PRICES

	Sept. 1937	Sept. 1936	Aug. 1937
WHOLESALE PRICES:			
U. S. Bureau of Labor Statistics (1926 = 100)	87.4	81.6	87.5
The Annalist (1926 = 100)	94.4	85.0†	94.3
FARM PRICES:			
U. S. Department of Agriculture (1910–14 = 100)	118.0	124.0	123.0
U. S. Bureau of Labor Statistics (1926 = 100)	85.9	84.0	86.4
RETAIL PRICES:			
Food (U. S. Bureau of Labor Statistics, 1923–25 = 100)	85.8	84.3	85.5
Department Stores (Fairchild's Publications, Jan. 1931 = 100)	96.3	89.3	96.6

†Revised.

STOCK PRICES

	Sept. 1937	Sept. 1936	Aug. 1937
Standard Indexes of the Securities Markets:			
419 Stocks Combined	106.4	114.1	120.5
347 Industrials	126.2	130.2	143.5
32 Rails	42.6	55.4	50.9
40 Utilities	89.2	107.7	97.0

NOTE: From Standards Statistics Co., Inc.

BUILDING PERMITS

	Sept. 1937	Sept. 1936	Aug. 1937	Third Quarter 1937	Third Quarter 1936
Abilene	$ 53,320	$ 7,310	$ 40,335	$ 110,758	$ 68,562
Amarillo	222,782	59,559	176,879	479,391	161,792
Austin	210,467	576,881	277,582	923,747	1,202,314
Beaumont	53,686¶	61,637	102,783	266,359¶	174,146
Big Spring	26,419	13,420	13,735	51,604	39,778¶
Brownsville	9,330	4,490	17,775	40,415	18,658
Brownwood	1,400	2,015	325	2,875	5,147
Cleburne	4,030	3,261	2,200	18,030	8,728
Corpus Christi	228,685	212,305	155,110	505,435¶	1,193,449
Corsicana	3,250	6,063	1,779	21,359	93,568
Dallas	828,358	688,211	644,848	2,310,779	1,967,288
Del Rio	13,756	2,255	20,125	36,006	16,080
Denison	3,076	14,034	4,400	15,761	28,974
El Paso	121,271	56,152	50,161	236,026	203,611
Fort Worth	288,026	414,949	322,898	951,071	1,992,130
Galveston	193,087¶	166,923	64,891	329,426¶	805,960
Graham	34,350	10,300	28,375	77,425	43,025
Harlingen	44,272	2,195	53,550¶	122,122¶	36,827¶
Houston	1,009,430	1,077,594	1,817,440	3,818,915	2,847,711
Jacksonville	5,500	2,750	6,150	20,950	7,715
Laredo	8,090	10,560	3,975	19,440	32,260
Lubbock	169,560	112,967	97,875	346,430	279,648
McAllen	55,675	4,200	34,515	138,150	55,950
Marshall	19,430	35,192	23,940	80,048	96,369
Palestine	11,401	31,095	24,478	50,990	63,096
Pampa	25,800	43,050	2,965	58,415	80,478¶
Paris	18,270	9,150	63,575	87,480	31,850
Plainview	25,499	650	8,788	35,337¶	6,500
Port Arthur	52,434	69,519	79,166	193,084	267,484
San Angelo	10,714	12,670	28,820	69,782	48,570
San Antonio	225,608	258,593	282,839¶	790,817¶	777,723¶
Sherman	9,672	17,114	16,331	44,830	86,692
Snyder	7,900	500	4,850	19,625	500
Sweetwater	16,870	4,127	5,985	33,580	32,085¶
Tyler	69,763	179,673	112,991	304,966	393,591
Waco	236,313	83,703	94,820	422,758	220,747
Wichita Falls	35,493	37,945	25,940	86,703	80,973
TOTAL	$ 4,353,087	$ 4,293,012	$ 4,713,194	$13,120,889	$13,469,979

¶Does not include public works.
NOTE: Compiled from reports from Texas chambers of commerce to the Bureau of Business Research.

SEPTEMBER CREDIT RATIOS IN TEXAS RETAIL STORES

(Expressed in Per Cent)

	Number of Stores Reporting	Ratio of Credit Sales to Net Sales 1937	1936	Ratio of Collections to Outstandings 1937	1936	Ratio of Credit Salaries to Credit Sales 1937	1936
All Stores	74	65.9	64.5	37.1	36.0	1.0	1.0
Stores Grouped by Cities:							
Abilene	3	62.8	64.4	30.0	26.8	1.4	1.3
Amarillo	3	60.2	58.1	35.2	31.4	1.4	1.4
Austin	7	61.0	61.0	38.8	35.3	1.0	1.1
Dallas	10	72.2	69.9	37.8	37.0	0.9	1.0
Fort Worth	9	65.1	63.4	33.7	32.2	1.1	1.1
Galveston	3	68.1	64.9	43.2	36.2	2.2	2.4
Houston	9	64.9	63.3	38.9	39.6	1.2	1.1
San Antonio	6	60.5	59.9	42.8	42.0	0.7	0.7
Waco	4	64.6	64.1	29.4	26.8	1.0	1.2
All Others	20	58.0	58.0	35.6	34.8	1.2	1.4
Stores Grouped According to Type of Store:							
Department Stores (Annual Volume Over $500,000)	18	65.7	64.4	38.4	36.7	1.0	1.0
Department Stores (Annual Volume Under $500,000)	15	60.7	60.8	34.8	32.4	1.4	1.4
Dry Goods-Apparel Stores	5	58.5	58.0	36.3	29.1	1.7	1.8
Women's Specialty Shops	14	68.3	66.0	34.8	35.2	0.6	0.7
Mens Clothing Stores	22	66.6	64.9	35.2	35.7	1.6	1.5
Stores Grouped According to Volume of Net Sales During 1936:							
Over $2,500,000	10	68.9	67.6	40.4	40.6	0.9	0.9
$2,500,000 down to $1,000,000	9	61.0	61.3	31.3	31.4	1.0	1.0
$1,000,000 down to $500,000	10	59.9	59.3	40.8	39.5	1.1	1.1
$500,000 down to $100,000	34	60.7	60.9	34.3	32.4	1.8	1.7
Less than $100,000	11	58.9	60.6	38.3	42.8	2.7	2.6

NOTE: The ratios shown for each year, in the order in which they appear from left to right, are obtained by the following computations: (1) Credit sales divided by net sales. (2) Collections during the month divided by the total accounts unpaid on the first of the month. (3) Salaries of the credit department divided by credit sales.

The data are reported to the Bureau of Business Research by Texas retail stores.

POSTAL RECEIPTS

	Sept. 1937	Sept. 1936	Aug. 1937	Third Quarter 1937	1936
Abilene	$ 16,747	$ 14,233	$ 15,357	$ 49,019	$ 45,235
Amarillo	30,110	27,382	27,694	87,584	80,769
Austin	51,065	59,093	53,170	156,675	161,880
Beaumont	25,417	21,251	22,460	72,252	63,326
Big Spring	5,243	4,833	4,885	15,820	14,192
Brownsville	4,486	5,326	4,962	15,287	15,666
Brownwood	5,665	5,537	5,138	16,440	14,953
Corpus Christi	21,065	17,446	23,330	67,340	52,212
Corsicana	5,139	5,006	4,685	14,648	14,375
Dallas	368,511	363,619	303,273	1,004,448	1,026,701
Del Rio	3,804	3,146	4,293	11,759	8,821
Denison	4,364	4,207	4,389	13,385	12,753
El Paso	40,689	39,894	44,201	125,436	116,580
Fort Worth	141,633	143,526	129,979	399,563	385,662
Galveston	25,242	24,241	28,127	80,071	76,444
Graham	2,191	1,709	2,225	6,836	5,625
Harlingen	4,792	4,637	5,535	15,607	12,810
Houston	223,122	199,054	210,091	649,477	588,515
Longview	9,264	7,724	8,571	28,254	25,370
Lubbock	19,558	15,715	12,837	46,003	38,793
McAllen	3,445	3,182	3,329	10,505	9,806
Marshall	5,407	5,008	5,346	16,558	15,578
Palestine	4,703	4,499	7,440	16,225	15,595
Pampa	6,044	5,179	5,789	19,170	17,370
Paris	6,727	5,514	4,891	16,873	16,364
Plainview	3,996	3,309	3,643	11,385	9,671
Port Arthur	10,667	9,915	11,168	33,236	30,023
San Angelo	11,096	9,360	9,919	31,444	29,538
San Antonio	114,016	106,844	111,604	335,535	317,024
Sherman	8,071	7,163	6,452	21,853	20,708
Sweetwater	5,974	5,138	4,110	14,200	14,547
Tyler	14,218	14,632	15,377	44,102	45,002
Waco	33,849	30,210	30,478	94,655	86,824
Wichita Falls	20,159	18,889	22,459	63,880	60,854
TOTAL	$1,256,479	$1,196,421	$1,157,207	$3,605,525	$3,449,586

NOTE: Compiled from reports from Texas chambers of commerce to the Bureau of Business Research.

BANKING STATISTICS

(In Millions of Dollars)

	September 1937 Dallas District	September 1937 United States	September 1936 Dallas District	September 1936 United States	August 1937 Dallas District	August 1937 United States
DEBITS to individual accounts	825	33,317	734	33,115	969*	40,597*
Condition of reporting member banks on—	September 29, 1937		September 30, 1936		September 1, 1937	
ASSETS:						
Loans and investments—total	511	22,026	490	22,682	508	22,319
Loans—total	245	10,004	220	8,753	234	10,027
Commercial, industrial, and agricultural loans:						
On securities	13	601	‡	‡	13	595
Otherwise secured and unsecured	143	4,209	‡	‡	134	4,043
Open market paper	4	472	‡	‡	3	466
Loans to brokers and dealers in securities	3	1,227	3	1,194	3	1,392
Other loans for purchasing or carrying securities	15	682	‡	‡	16	703
Real estate loans	21	1,165	23	1,139	21	1,164
Loans to banks	—	97	—	112	1	135
Other loans:						
On securities	10	732	‡	‡	9	717
Otherwise secured and unsecured	36	819	‡	‡	34	812
U. S. Government obligations	188	7,903	185	9,336	196	8,193
Obligations fully guaranteed by U. S. Government	28	1,131	37	1,256	29	1,130
Other securities	50	2,988	48	3,337	49	2,969
Reserve with Federal Reserve Banks	114	5,488	96	5,023	111	5,186
Cash in vault	11	323	9	378	9	281
Balances with domestic banks	154	1,737	173	2,363	142	1,638
Other assets—net	29	1,285	28	1,341	28	1,302
LIABILITIES:						
Demand deposits—adjusted	390	14,864	361	15,116	387	14,924
Time deposits	127	5,293	120	5,063	124	5,268
U. S. Government deposits	19	644	43	847	19	591
Inter-bank deposits:						
Domestic banks	194	4,998	190	5,919	181	4,883
Foreign banks	1	569	—	484	—	585
Borrowings	—	4	—	—	1	15
Other liabilities	8	876	5	848	5	845
Capital account	80	3,611	77	3,510	81	3,615

‡Not available.
*Five weeks.
NOTE: From Federal Reserve Board.
Debits for the Dallas Federal Reserve District during the third quarter were $2,602,789,000 as compared with $2,220,803,000 for the same period of 1936. Debits for all Federal Reserve Districts during the third quarter of 1937 were $109,485,870,000 as compared with $105,932,458,000 for the same period of 1936.

COTTON BALANCE SHEET FOR THE UNITED STATES AS OF OCTOBER 1

(In Thousands of Running Bales Except as Noted)

	Carryover Aug. 1	Imports to Oct. 1¶	Government Estimate as of Oct. 1§	Total	Consumption to Oct. 1§	Exports to Oct. 1§	Total	Balance Oct. 1
1928–1929	2,536	44	13,993	16,573	1,019	1,063	2,082	14,491
1929–1930	2,313	49	14,915	17,277	1,105	952	2,057	15,220
1930–1931	4,530	9	14,486	19,025	746	1,269	2,015	17,010
1931–1932	6,369	13	16,284	22,666	889	769	1,658	21,008
1932–1933	9,682	14	11,425	21,121	897	1,186	2,083	19,038
1933–1934	8,176	23	12,885	21,084	1,088	1,400	2,488	18,596
1934–1935	7,746	19	9,443	17,208	714	706	1,420	15,788
1935–1936	7,138	14	11,464	18,616	859	728	1,587	17,029
1936–1937	5,397	22	11,609	17,028	1,205	752	1,957	15,071
1937–1938	4,498	14	17,978	22,490	1,206	838	2,044	20,446

The cotton year begins August 1. ¶In 500-pound bales. §In running bales, counting round bales as half bales.
NOTE: The figures have been revised in accordance with the revisions made by the United States Bureau of the Census.

CONSUMPTION OF ELECTRIC POWER IN TEXAS

	Power Consumed (In Thousands of K.W.H.)					Percentage Change		
	Sept. 1937	Sept. 1936	Aug. 1937	Third Quarter 1937	Third Quarter 1936	Sept. 1937 from Sept. 1936	Sept. 1937 from Aug. 1937	Third Quarter 1937 from Third Quarter 1936
Commercial	51,858	44,860	51,104	151,669	130,273	+15.6	+ 1.5	+16.4
Industrial	117,820	98,542	123,274	356,287	290,194	+19.6	− 4.4	+22.8
Residential	35,286	30,484	34,423	102,578	87,953	+15.8	+ 2.5	+16.6
All Other	32,888	25,438	31,303	92,449	73,704	+29.3	+ 5.1	+25.4
TOTAL	237,852	199,324	240,104	702,983	582,124	+19.3	− 0.9	+20.8

NOTE: Prepared from reports from 17 electric power companies to the Bureau of Business Research.